## **REMARKS**

Claims 1 through 10 are pending in this application. All claims now stand rejected under 35 U.S.C. § 103(a) as being obvious from Miichi U.S. Patent No. 5,880,745. This § 103 rejection (Paper No. 9) replaces a prior § 103 rejection based on a combination of Miichi with Kitou U.S. Patent No. 5,870,073 (Paper No. 7). As conceded in Paper No. 7, Miichi does not have a synchronizing signal generator, although Kitou does have one. Yet, Paper No. 9 withdrew Kitou as a § 103 prior art reference.

1. No claim limitation can be ignored under § 103. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031 (Fed. Cir. 1994)("The PTO must consider all claim limitations when determining the patentability of an invention over the prior art.").

In *Al-Site Corp. v. VSI Int'l*, 174 F.3d 1308, 1324, 50 U.S.P.Q.2d 1161 (Fed. Cir. 1999), the Federal Circuit held that a claim was not shown to be obvious from the Seaver patent. The reason was that "although the Seaver patent discloses some of the elements recited in the Magnivision patents' claims, it does not disclose the display member, the cantilevered support, or the aperture for mounting the hanger tag on the cantilevered support," and the art of record did not suggest adding those elements to Seaver. Similarly, the Federal Circuit rejected a challenge against an obviousness determination where the cited art *did* contain all elements of the invention. *In re Schreiber*, 128 F.3d 1473, 1479, 44 U.S.P.Q.2d 1429 (Fed. Cir. 1997)("Schreiber argues that the combination

of Harz and Fisher does not disclose all the limitations of claim 2 because neither Harz nor Fisher discloses the functionally defined features of the top. That argument is without merit because, as we have already noted, Harz discloses those functionally defined limitations.").

See also In re Gartside, 203 F.3d 1305, 53 USPQ2d 1769 (Fed. Cir. 2000) ("We agree with the Commissioner that substantial evidence supports the Board's factfinding and that the Board correctly concluded that the claims were unpatentable under § 103. As an initial matter, we agree with the Commissioner that substantial evidence supports the Board's finding that Gartside's '645 and '235 patents contain all the limitations set forth in claim 47."); Mitsubishi Electric Corp. v. Ampex Corp., 190 F.3d 1300, 1313, 51 U.S.P.Q. 2d 1910 (Fed. Cir. 1999) (upholding § 103 determination because "a reasonable jury could have concluded that the second Williard article in combination with either the first Williard article or the Goode and Phillips article provided all of the elements of the claimed invention"); In re Rouffet, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453 (Fed. Cir. 1998)(court stated that it would uphold the part of the Board's § 103 ruling on the point that the three cited references contained all of the claimed elements: "the Board did not err in finding that the combination of King, Rosen, and Ruddy contains all of the elements claimed in Rouffet's application").

The lack of the signal-generator limitation in the only art of record cited to support

the rejection therefore undermines the rejection.

2. It is contended that Miichi alone supports the rejection of all claims (Paper No. 9, p. 2,  $\P$  2). However, id.,  $\P$  3, recites a number of limitations of the claims, other than the limitation that there must not be any analog-to-digital converter (ADC) or phase-locked-loop circuit (PLL), and then adds, without citation to any specific teaching, suggestion, or motivation in the prior art, that "it would have been obvious to one or ordinary skill...not to utilize any analog-to-digital converter or phase-locked-loop circuit for signal conversion in order to provide a flat panel display which displays digital display information supplied by a digital data processing device" (id. at 3).

This rejection has several major deficiencies, any one of which alone would require withdrawal of the rejection for failure to establish a *prima facie* case under § 103. Preliminarily, Jun respectfully notes that PTO has the burden of proof, by a preponderance of evidence, to show that an applicant is not entitled to a patent because the claimed subject matter is obvious from the art of record. A patent applicant is entitled to a patent "unless" the PTO establishes otherwise. See, e.g., *In re Dembiczak*, 175 F.3d 994, 1001, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999); *In re Epstein*, 32 F.3d 1559, 1564 (Fed. Cir. 1994); *In re Rijckeart*, 9 F.3d 1551, 1552, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). As Jun will show, the PTO has not satisfied its burden to prove a *prima facie* case under § 103 here.

a. In In re Dembiczak, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999), the Federal Circuit overturned an obviousness rejection by the Board because of its failure to make the kind of obviousness legal analysis that the Supreme Court commanded in Graham v. John Deere Co., 376 U.S. 1, 17-18 (1966). Such a legal analysis must begin, the Federal Circuit has consistently held, with making specific findings of fact regarding the level of ordinary skill in the art. Thus the Dembiczak decision held that an obviousness rejection must be reversed if, like the instant rejection, it fails to contain "specific findings of fact regarding the level of ordinary skill in the art." 175 F.3d at 1000-01, 50 USPQ2d at 1618. No such findings can be found in Paper No. 9. In addition, the findings that the PTO makes on the ordinary level of skill must be supported by substantial evidence of record. In re Kaplan, 789 F.2d 1574, 1580, 229 USPQ 678, 683 (Fed. Cir. 1986) ("Even if obviousness of the variation is predicated on the level of skill in the art, prior art evidence is needed to show what that level of skill was."). See also In re Mayne, 104 F.3d 1339, 1341, 41 USPQ2d 1451, 1453 (Fed. Cir. 1997) ("The foundational facts for the prima facie case of obviousness are: ... (3) the level of ordinary skill in the art."). No such evidence exists in this record.

Thus, the rejection in this office action lacks findings and analysis that the Federal Circuit considers essential to support a rejection based on ordinary skill in the art. In addition, the rejection in office action lacks substantial evidence of record to support such

findings, even if they had been made.

b. Although the rejection purports to be based on a single reference, Miichi, that is a pretense. It must be conceded that Miichi does not disclose—it does not even mention —a system or method in which there is no resort to an ADC or PLL. Miichi alone therefore cannot disclose Jun's beneficial invention, by means of which Jun avoids and obviates the considerable increase of production cost, as well as signal loss and jittering, making signal conversion unstable, and limitation of frequency range, that result from use of ADC and PLL (see specification, p. 2) in devices such as that of Miichi (and also Kitou). Since Miichi does not teach a way to accomplish his result without using an ADC and PLL, the knowledge of how to accomplish Miichi's result without using an ADC and PLL must come from someplace else. Something from somewhere must be combined with Miichi, and Miichi must be adapted to work with that something from somewhere, to get signal conversion without ADC and PLL. That something from somewhere must be found in the documentable prior art. It must be in a textbook, a patent, a magazine article, or something accessible to artisans of ordinary skill. In re Dembiczak, 175 F.3d 994, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999); In re Rouffet, 149 F.3d 1350, 1359, 47 U.S.P.Q.2d 1453, 1459 (Fed. Cir. 1998); In re Rouffet, 149 F.3d 1350, 1359, 47 U.S.P.Q.2d 1453, 1459 (Fed. Cir. 1998). Where is the documentation here? The PTO must rely on a written evidentiary record, not unwritten speculation. In re Gartside, 203 F.3d 1305, 53

USPQ2d 1769 (Fed. Cir. 2000).

Due process requires the PTO to cite the evidence *on the record*, so that (if it exists) Jun can controvert it on the record.

c. It is the duty of the PTO also to point to a teaching, suggestion, or motivation which is documented and made of record—that specifically justifies combining the information in whatever it is that is to be combined with Miichi to arrive at Jun's non-PLL, non-ADC device. Before the PTO may combine the disclosures of two or more prior art references in order to establish prima facie obviousness, there must be some suggestion for doing so, found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In re Dembiczak, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1998)(teaching or motivation or suggestion to combine is an "essential evidentiary component of an obviousness holding"); ATD Corp. v. Lydall, Inc., 159 F.3d 534, 546, 48 U.S.P.Q.2d 1321 (Fed. Cir. 1998)("There must be a teaching or suggestion within the prior art, or within the general knowledge of a person of ordinary skill in the field of the invention, to look to particular sources of information, to select particular elements, and to combine them in the way they were combined by the inventor."); In re Rouffet, 149 F.3d 1350, 1355, 47 U.S.P.Q.2d 1453 (Fed. Cir. 1998; In re Chu, 66 F.3d 292 (Fed. Cir. 1995); Heidelberger Druckmaschinen AG v. Hantscho Commercial Prods., Inc., 21 F.3d 1068, 1072 (Fed. Cir. 1994)("When the patented

invention is made by combining known components to achieve a new system, the prior art must provide a suggestion or motivation to make such a combination."); *In re Jones*, 958 F.2d 347, 351, 21 U.S.P.Q.2d 1941, 1943–44 (Fed. Cir. 1992); *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1586, 1589–90 (Fed. Cir. 1988); *In re Geiger*, 815 F.2d 686, 688 (Fed. Cir. 1987); *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 U.S.P.Q.2d 929, 933 (Fed. Cir. 1984). The PTO must explain, as it did not do here, what specific understanding or technical principle would have suggested the combination of references. *In re Dembiczak*, 175 F.3d 994, 1000, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1998).; *In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1459 (Fed. Cir. 1998).

The obligations of the PTO under *Dembiczak* and *Rouffet* cannot be evaded by citing a single patent instead of two. Since Miichi teaches nothing about avoiding ADC and PLL, knowledge about avoiding ADC and PLL must be combined with Miichi. And the PTO must support the combination as well as supplying a source for the no-ADC-PLL information. The speculative statement that the control signal can be supplied to the image signal source "regardless of the types of image signal source" (Paper No. 9, p. 3) is no substitute for a teaching, motivation, or suggestion in the prior art to *avoid* using a PLL and ADC. Supplying it "regardless of the...source" is not the same thing as specifically avoiding ADC and PLL, which Jun teaches. Until Jun discovered that you could get improved results by avoiding ADC and PLL (namely, lower production cost,

less signal loss and jittering, making signal conversion more stable, and better frequency range), no one had any motivation to use his alternative kind of circuit.

- d. Furthermore, the statement that the control signal can be supplied to the image signal source "regardless of the types of image signal source" is not only speculation and conjecture, but it is wrong, as Jun's specification shows. If you supply the signal in the conventional manner, as taught in Michii and Kitou, you use an ADC and PLL. When you do that, you get considerable increase of production cost, as well as signal loss and jittering, making signal conversion unstable, and limitation of frequency range. It does make a difference, as Jun discovered and teaches in this specification, what kind of source you use.
- 3. Paper No. 9 does not specifically address claims 9 or 10. These rejections are not supported and Jun respectfully submits that the rejections should be withdrawn.
- a. Apparatus claim 9 is an independent claim directed to a flat panel display apparatus in which the improvement over the prior art is "a means for converting said data to a corresponding video signal without utilization of an analog-to-digital converter (ADC) or a phase-locked loop (PLL) circuit." This claim clearly invokes § 112 ¶ 6. It uses means-plus-function language and has no structure, and certainly it has insufficient structure fully to carry out the recited function. See *Rodime PLC v. Seagate Technology*, *Inc.*, 174 F.3d 1294, 50 U.S.P.Q.2d 1429 (Fed. Cir. 1999).

Since the claim invokes § 112 ¶ 6, it makes the specification a glossary for the claim and incorporates by reference the description of structure of the specification and equivalents thereof. *Chiuminatta Concrete Concepts v. Cardinal Indus., Inc.,* 145 F.3d 1303, 46 U.S.P.Q.2d 1752 (Fed. Cir. 1997). Under Federal Circuit precedent, an obviousness or anticipation rejection of such a claim can be supported only if the PTO makes a finding supported by substantial evidence to the effect that the cited art identically discloses the structure described in the specification or its equivalent, or makes it obvious (under the *Dembiczak-Rouffet* test). See *In re Donaldson Co.,* 16 F.3d 1189, 29 U.S.P.Q.2d 1845 (Fed. Cir. 1994)(en banc); *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). Where is that finding here?

It is not present. It could not be made based on this record. Therefore, the rejection cannot be sustained.

b. Claim 10 is an independent method claim, in step-plus-function format, per § 112 ¶ 6. The claim is for a method for processing display information containing video data and synchronizing data from a host processing digital data in a serial communication, in which there is the novel improvement of "a step for converting said video data to a corresponding signal without utilizing an analog-to-digital converter (ADC) or phase-locked loop (PLL) circuit." No art of record teaches that step in a method of the recited kind. Even if the apparatus were old, which it is not, the invention would still be

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patentable under 35 U.S.C. § 100(b) as a new use.

This is a novel and useful method not taught in the prior art. No reference made of

record herein teaches, suggests, or motivates deliberately doing the video data conversion

"without utilizing an analog-to-digital converter (ADC) or phase-locked loop (PLL)

circuit." Nothing in the record shows the same acts and structure, or equivalents thereof,

as Jun teaches in his instant specification. Accordingly, the PTO cannot make the

underlying Dembiczak and Donaldson fact findings absolutely needed to establish

unpatentability.

In view of the above, it is submitted that the claims of this application are in

condition for allowance, and early issuance thereof is solicited. Should any questions

remain unresolved, the Examiner is requested to telephone Applicant's attorney.

No fee is incurred by this Response.

Respectfully submitted,

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